U.S. COAST GUARD
MARINE SAFETY OFFICE PORTLAND, MAINE

SAFETY ALERT

Propeller Clearing Ports

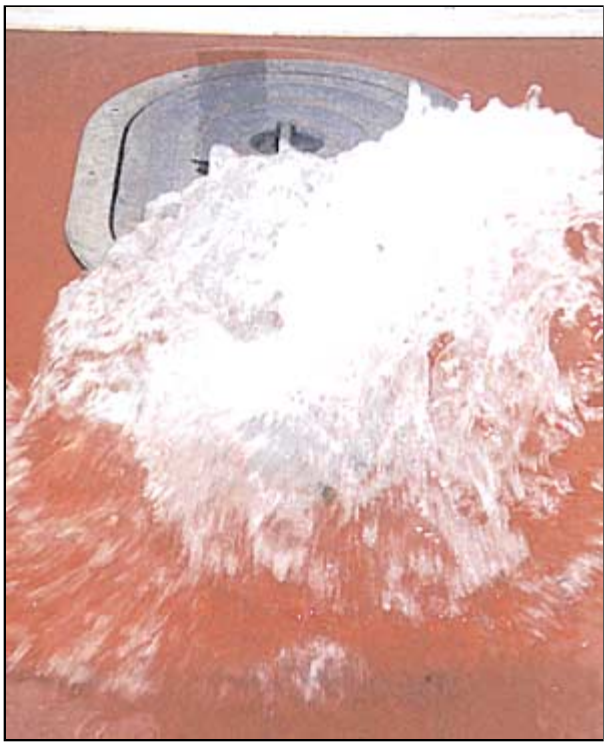
In August of 1996 a commercial fishing vessel capsized while tending hagfish traps 13 nautical miles south east of Cape Elizabeth, Maine. The crew of the vessel first noticed the flooding condition while recovering fishing gear, but were unable to determine the source of the flooding. Within 10 minutes, the vessel had capsized, remaining on the surface partially submerged. The vessel's crew safely abandoned to a liferaft.

Following salvage of the vessel, Coast Guard investigators determined that the source of the flooding was from a *Propeller Clearing Port*, which had been installed over the vessel's propeller to allow the crew to clear away line and fishing gear which may have become fouled in the vessel's propeller.

In this incident, the vessel's master had removed the propeller clearing port hatch the day prior to the accident to clear line that had become fouled in the propeller. Coast Guard investigators believe that this hatch was not properly secured in place, and came loose under pressure the following day.

The Coast Guard believes that propeller clearing ports are becoming more popular on vessels constructed to tend stationary fishing gear. Stationary fishing gear includes traps used to catch lobster and hagfish, as well as other types of fishing equipment, such as gillnets and longlines. The lines and trap markers used to mark and recover stationary fishing gear creates a higher risk of fouled propellers, which can easily disable a vessel, than with other types of fishing equipment.

Because the hatches of propeller clearing ports are placed above waterline, some vessel operators may underestimate the risk of flooding associated with these devices. Clearing ports are placed in the same plane as the propeller, in order to provide access to clear away line and debris. In this location side wash from the vessel's propeller will place considerable pressure on the clearing port hatch cover while the vessel is maneuvered. In the event the hatch cover becomes loose, the vessel may experience flooding rates in excess of approximately 1000 gallons per minute.



To demonstrate the flooding hazard associated with propeller clearing ports, a vessel is maneuvered with the clearing port cover removed. This vessel's clearing port hatch is located on the weather deck, which makes flooding easy to detect.

The Coast Guard advises fishermen considering installation of propeller clearing ports to design the ports with the access hatch on the vessel's main deck. On vessels with access hatches placed below the main deck, means to prevent the hatch from unintentional opening, such as double nuts, safety wiring of bolts, etc. should be utilized. The Coast Guard strongly advises against the installation of clearing ports below the main deck in hulls not fitted with watertight bulkheads.

For further information on this Safety Alert contact:

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